

5.3 Interpreting and Sketching Graphs

LESSON FOCUS

Describe a possible situation for a given graph and sketch a possible graph for a given situation.

A Scuba Diver's Dive

Make Connections

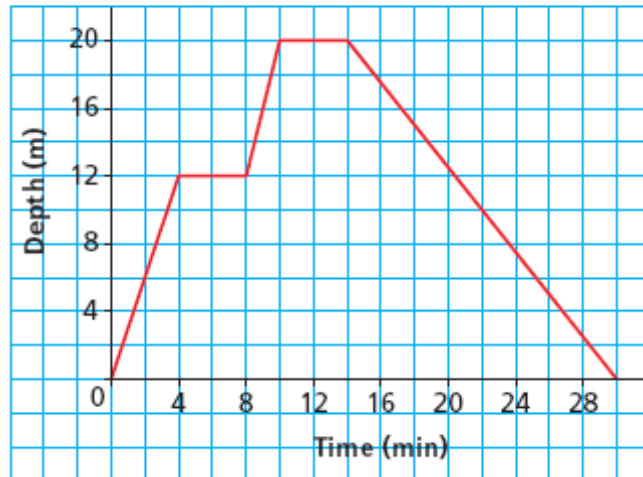
In math, a graph provides much information. This graph shows the depth of a scuba diver as a function of time.

How many minutes did the dive last?

At what times did the diver stop her dive?

What was the greatest depth the diver reached?

For how many minutes was the diver at the greatest depth?

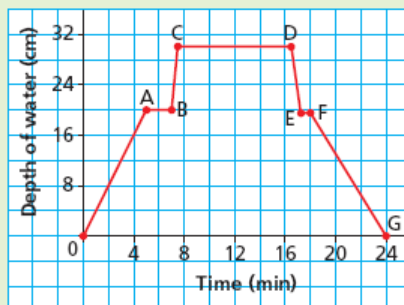


TRY THIS

Work with a partner.
You will need grid paper.

This graph shows the depth of water in a bathtub as a function of time.

Depth of Water in a Bathtub



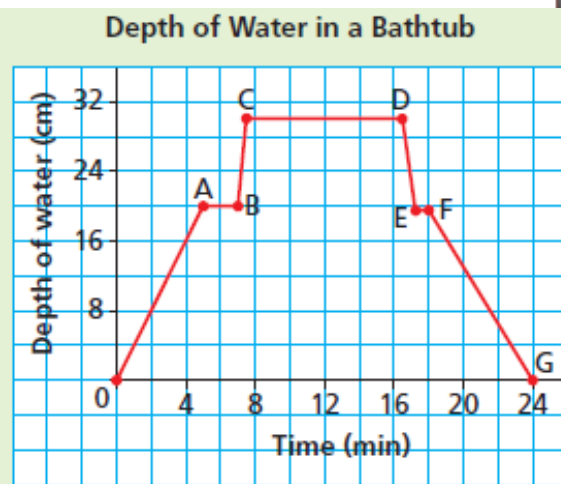
- A. What does each segment of the graph represent? Compare your description with that of your partner. Are both your stories the same? Should they be? Explain.

TRY THIS (continued)

- B. Sketch a graph to represent this situation:
You put the plug in the bath and turn on the taps.
You leave the bathroom and return to discover that the bath has overflowed.
You turn off the taps and pull out the plug to let out some water. You put the plug back in.
- C. Compare your graph with that of your partner. How are the graphs the same? How are they different?

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- What does segment OA represent?
What does segment AB represent?
What does segment BC represent?
What does segment CD represent?
What does segment DE represent?
What does segment EF represent?
What does segment FG represent?



Is the graph always described the same way? Should it be? Explain.

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